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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/683,027	11/09/2001	John C. Malinowski	BUR920000228	6082

30449 7590 07/19/2002
SCHMEISER, OLSEN + WATTS
SUITE 201
3 LEAR JET
LATHAM, NY 12033

EXAMINER

THAI, LUAN C

ART UNIT	PAPER NUMBER
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2827

DATE MAILED: 07/19/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/683,027

Applicant(s)

MALINOWSKI ET AL.

Examiner

Luan Thai

Art Unit

2827

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 May 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) 34-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Election/Restriction

1. Applicant's election with traverse of group I, claims 1-33 in Paper No. 4 filed May 06, 2002 is acknowledged. The traversal is on the ground(s) that the subject matter of all claims 1-40 is related that a thorough search for the subject matter of any one group of claims would encompass a search for the subject matter of the remaining claims. This is not found persuasive because these inventions are distinct for the reasons as previous mentioned on Election/Restriction paper dated 04/23/02 and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper. Furthermore, the examiner respectfully submits that searching/examining the Group II method invention in addition to the elected Group I device invention would, in fact, be more than a slight added burden.

The requirement is still deemed proper and is therefore made FINAL.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter that the applicant regards as his invention.

3. Claims **11, 22 and 33** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claims **11, 22 and 33**, lines 10, the limitation "said electrostatic discharge protection device" has no antecedent basis and is unclear as to whether it implies "the first electrostatic discharge protection device" or "the second electrostatic discharge protection device". Also, the limitation "said electrostatic discharge sensitive device" in lines 11-12 has no antecedent basis and is unclear as to whether it implies "the first electrostatic discharge sensitive device" or "the second electrostatic discharge sensitive device".

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --
(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371© of this title before the invention thereof by the applicant for patent.

5. Claims **1-2, 4-5, 8-9, 12-13, 15-16, 19-20, 23-24, 26-27 and 30-31** are rejected under U.S.C. 102(e) as being anticipated by Lin (6,180,426).

The figures and reference numbers referred to in this office action are used merely to indicate an example of a specific teaching and are not to be taken as limiting.

Regarding claims **1, 4, 8, 12, 15, 19, 23, 26 and 30**, Lin discloses a dual chip stack mounted on a module 320, comprising: a semiconductor chip 305

including an integrated circuit having at least one first electrostatic discharge sensitive device; a non-semiconductor chip 310, attached to the semiconductor chip 305, the non-semiconductor chip having at least one second electrostatic discharge sensitive device (see figure 3) and at least one first electrostatic discharge protection device electrically connected to the first electrostatic discharge sensitive device (Col. 6, lines 29-35). Lin further teaches a second electrostatic protection device electrically connected to the second electrostatic discharge sensitive device (Col. 7, lines 42-47).

Regarding claims **2, 5, 9, 13, 16, 20, 24, 27, and 31**, although Lin does not explicitly disclose the electrostatic discharge sensitive device being selected from the group consisting of transistors, diodes, resistors, capacitors, and inductors, this feature is taken to be inherent in Lin's first chip 305 and second chip 310, since the means of integrated circuit chips (305 and 310) having internal circuits are disclosed and it is apparent that the integrated circuit chip must have at least one of transistors, diodes, resistors, capacitors, and inductors.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims **3, 6, 10, 14, 17, 21, 25, 28, and 32** are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (6,180,426) in view of Voldman et al (6,198,136).

The figures and reference numbers referred to in this office action are used merely to indicate an example of a specific teaching and are not to be taken as limiting.

Regarding claims 3, 6, 10, 14, 17, 21, 25, 28, and 32, Lin discloses all the limitations of the claimed invention as detailed above except for teaching the electrostatic discharge protection device being selected from the group consisting of spark gaps, field emission devices, diodes, and gated diodes. An electrostatic discharge protection device made of diodes is conventional in semiconductor art as disclosed by Voldman et al (see figures 5, ESD 62-64). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use diodes for forming the electrostatic discharge protection device in Lin's device since the electrostatic discharge protection device made of diodes is conventional in semiconductor art as disclosed by Voldman et al.

8. Claims **7, 11, 18, 22, 29, and 33**, insofar as in compliance with 35 USC 112, are rejected under 35 U.S.C. 103(a) as being unpatentable over Lin (6,180,426) in view of Staab et al (5,610,790).

The figures and reference numbers referred to in this office action are used merely to indicate an example of a specific teaching and are not to be taken as limiting.


Regarding claims 7, 11, 18, 22, 29, and 33, Lin discloses all the limitations of the claimed invention as detailed above except for teaching the electrostatic discharge protection device being a spark gap. An electrostatic discharge protection device made of a spark gap is conventional in semiconductor art as disclosed by Staab et al (see figure 4, spark gap 409). It would have been obvious to one of ordinary skill in the art at the time the invention was made to use a spark gap for forming the electrostatic discharge protection device in Lin's device since the electrostatic discharge protection device made of a spark gap is conventional in semiconductor art as disclosed by Staab et al.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Luan Thai whose telephone number is (703) 308-1211. The examiner can normally be reached on 7:00 AM - 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Talbott can be reached on (703) 305-9883. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7724 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Luan Thai
July 14, 2002



KAMAND CUNEO
PRIMARY EXAMINER